

SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

SWIM-H2020 SM Regional Activities.....

Presented by:

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**SWIM and Horizon 2020 SM - REG 11 – regional on-site training
Good water governance, focusing on regulatory aspects and the design,
monitoring and enforcement of policies**

2nd October 2018, Brussels, Belgium

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ATKINS

Session 2: Compliance check of legal requirements using the example of the EU Urban Wastewater regulation

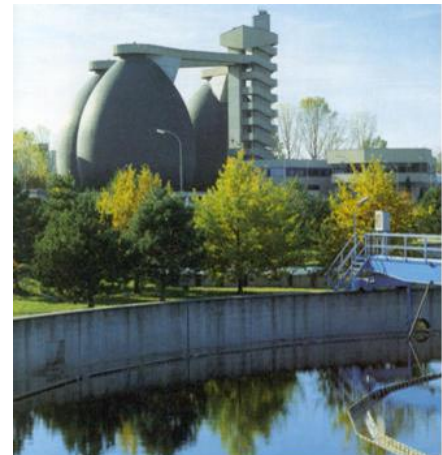
Agenda

- **Presentation** of the EU Urban Waste Water Treatment Directive (91/271/EEC, UWWTD) and the 9 requirements for effectively checking compliance
 - ✓ Compliance: does the MS comply with the requirements defined in a piece of legislation?
 - ✓ History of compliance check
 - ✓ Good and bad examples
 - ✓ New developments
- **Interactive session:** Analysis of national reporting and compliance check routines for the evaluation of (waste)water-related policies
- **Presentation and wrap-up of interactive session**

Session 2: Compliance check of legal requirements using the example of the EU Urban Wastewater regulation

The Urban Waste Water Treatment Directive (91/271/EEC, UWWTD)

- **Aim:** To protect the environment from adverse effects of urban wastewater discharges and discharges from wastewater from certain industrial (agro-food) sectors
- **Scope:** agglomerations above 2,000 p.e. (inhabitants).
- Concerns the collection, appropriate treatment and discharge of urban wastewater + information of citizens
- **Art. 3:** Collection of wastewater in collecting systems
- **Art. 4:** Secondary treatment of wastewater (C-removal)
- **Art. 5:** more stringent treatment (N- and/ or P-removal) in agglomerations > 10,000 p.e. in areas sensitive to eutrophication



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The Urban Waste Water Treatment Directive (91/271/EEC, UWWTD)

Article 15

1. Competent authorities or appropriate bodies shall monitor :

— discharges from urban waste water treatment plants to verify compliance with the requirements of Annex I.B in accordance with the control procedures laid down in Annex I.D,

2. Competent authorities or appropriate bodies shall monitor waters subject to discharges from urban waste water treatment plants and direct discharges as described in Article 13 in cases where it can be expected that the receiving environment will be significantly affected.

4. Information collected by competent authorities or appropriate bodies in complying with paragraphs 1, 2 and 3 shall be retained in the Member State and made available to the Commission within six months of receipt of a request.

Table 1: Requirements for discharges from urban waste water treatment plants subject to Articles 4 and 5 of the Directive. The values for concentration or for the percentage of reduction shall apply.

Parameters	Concentration	Minimum percentage of reduction ⁽¹⁾	Reference method of measurement
Biochemical oxygen demand (BOD ₅ at 20 °C) without nitrification ⁽²⁾	25 mg/l O ₂	70-90 40 under Article 4 (2)	Homogenized, unfiltered, undecanted sample. Determination of dissolved oxygen before and after five-day incubation at 20 °C ± 1 °C, in complete darkness. Addition of a nitrification inhibitor
Chemical oxygen demand (COD)	125 mg/l O ₂	75	Homogenized, unfiltered, undecanted sample Potassium dichromate
Total suspended solids	35 mg/l ⁽³⁾ 35 under Article 4 (2) (more than 10 000 p.e.) 60 under Article 4 (2) (2 000-10 000 p.e.)	90 ⁽¹⁾ 90 under Article 4 (2) (more than 10 000 p.e.) 70 under Article 4 (2) (2 000-10 000 p.e.)	— Filtering of a representative sample through a 0,45 µm filter membrane. Drying at 105 °C and weighing — Centrifuging of a representative sample (for at least five mins with mean acceleration of 2 800 to 3 200 g), drying at 105 °C and weighing

⁽¹⁾ Reduction in relation to the load of the influent.

⁽²⁾ The parameter can be replaced by another parameter : total organic carbon (TOC) or total oxygen demand (TOD) if a relationship can be established between BOD₅ and the substitute parameter.

⁽³⁾ This requirement is optional.

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Compliance check – requirement 1

Clear definition of elements of legislation

4. 'agglomeration' means an area where the population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to an urban waste water treatment plant or to a final discharge point ;



**Vague definition
leading to many
discussions**

7. 'primary treatment' means treatment of urban waste water by a physical and/or chemical process involving settlement of suspended solids, or other processes in which the BOD5 of the incoming waste water is reduced by at least 20 % before discharge and the total suspended solids of the incoming waste water are reduced by at least 50 % ;



**Clear
measurable
definition**

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Compliance check – requirement 2

Clear definition of appropriate parameters to check compliance

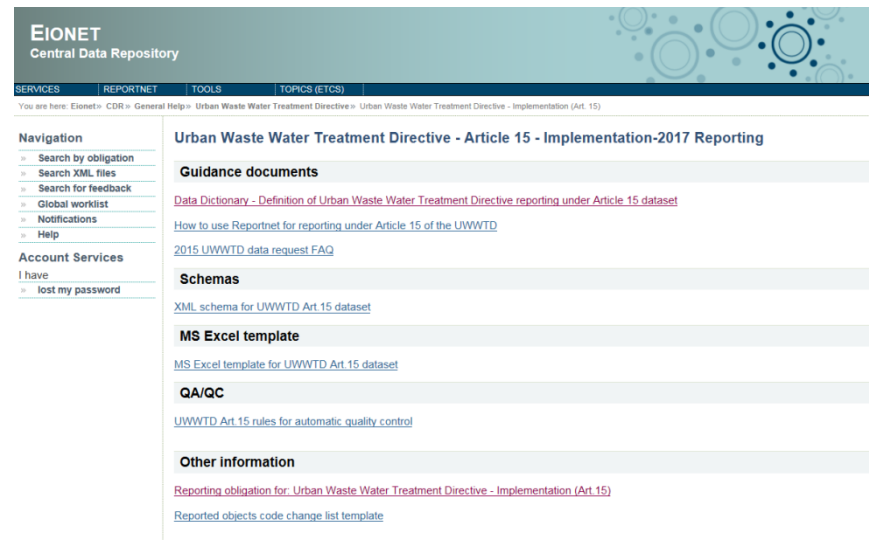
- Discussion at the COM/ UWWTD expert group, which parameters need to be requested on EU-level, e.g.:
 - ✓ monitoring results (BOD, COD, N_{tot}, P_{tot}) from discharges of single urban wastewater treatment plants (UWWTPs) **OR**
 - ✓ Assessment results of Member States (MS), whether an UWWTP complies with legal requirements (“pass”/”fail”)
- Question of responsibilities and duties of different authorities and of proportionality. Example above: COM is not responsible for the national execution. Therefore, assessment of single monitoring results is not done by the COM in the regular compliance check

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Compliance check – requirement 3

Clear definition of reporting routines and formats in order to assess compliance

- First years of UWWTD-reporting (2000 – 2006):
 - ✓ Tabular data requested via Excel-sheets, which were modified by MS
 - ✓ No clear advise, which tabular data is allowed
 - ✓ No clear definition of formats (e.g. word, shape files)
- Nowadays: database, technical specifications, consolidated data exchange formats, clear rules for changes in database



The screenshot displays the EIONET Central Data Repository website. The header includes the EIONET logo and navigation tabs for SERVICES, REPORTNET, TOOLS, and TOPICS (ETCS). The main content area is titled 'Urban Waste Water Treatment Directive - Article 15 - Implementation-2017 Reporting'. It features a 'Guidance documents' section with links to a Data Dictionary, a Reportnet usage guide, and a 2015 data request FAQ. Below this is a 'Schemas' section with links to an XML schema and an MS Excel template. A 'QA/QC' section provides a link to rules for automatic quality control. The 'Other information' section includes links to reporting obligations and a code change list template. A left sidebar contains a 'Navigation' menu with options like 'Search by obligation' and 'Search XML files', and an 'Account Services' section for password management.

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Compliance check – requirement 4

Strict timetable for reporting (ev. charges if reporting is not done on time)

- Strict deadlines for reporting (and penalties in case of non-reporting) are required in order to enforce reporting
- E.g. 8th UWWTD Implementation report: IT and PL were not presented in the report, as the data was not provided in sufficient quality on time

1.1- National and EU compliance rates as concerns collection, secondary treatment and more stringent treatment

Member State	Article 3 compliance rate (%)	Article 4 compliance rate (%)	Article 5 compliance rate (%)
Austria	100	100	100
Belgium	98	97	82
Bulgaria	12	11	1
Croatia	transition period pending	transition period pending	transition period pending
Cyprus	100	60	100
Czech Republic	100	87	54
Denmark	100	99	99
Estonia	94	97	89
Finland	100	100	100
France	100	83	99
Germany	100	100	100
Greece	100	96	100
Hungary	100	93	64
Ireland	100	91	1
Italy	-	-	-
Latvia	100	99	6
Lithuania	100	100	97
Luxembourg	100	99	42
Malta	100	0	0
Netherlands	100	100	100
Poland	-	-	-
Portugal	100	77	73
Romania	99	48	16
Slovakia	100	98	43
Slovenia	57	14	34
Spain	100	86	38
Sweden	100	98	89
United Kingdom	100	98	96
EU 15*	100	94	95
EU 13**	86	68	32
EU 28	98	92	88

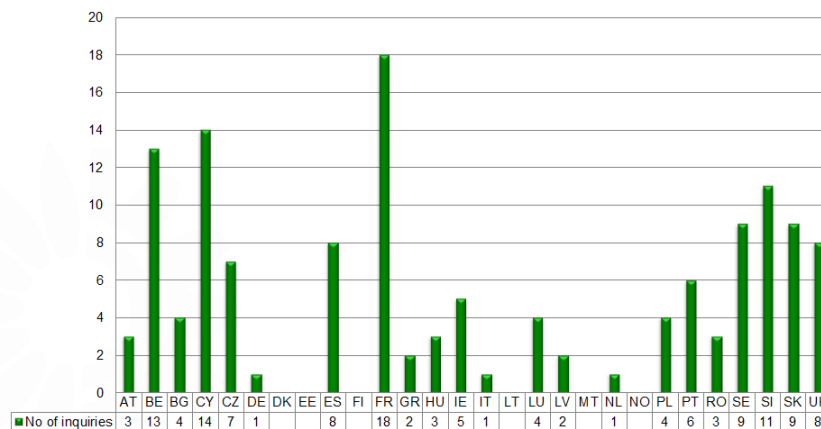
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Compliance check – requirement 5

Support during the reporting process

- Essential to guarantee smooth reporting process
- Example: helpdesk statistics during the 8th UWWTD reporting exercise

Helpdesk statistics



Source:

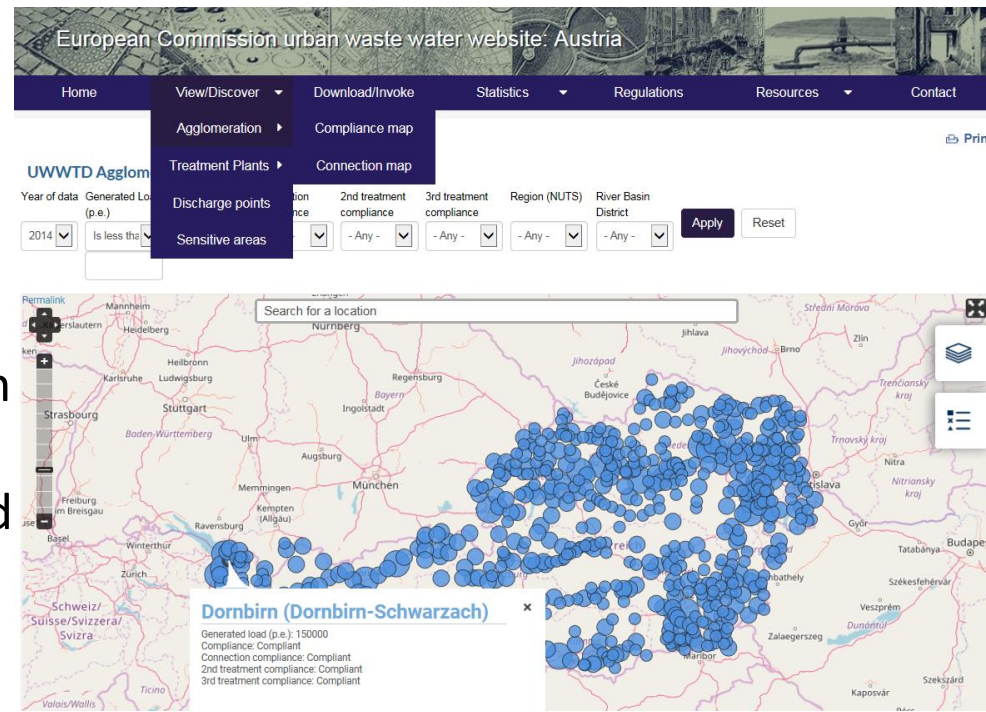
<https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>

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Compliance check – requirement 6

Automatized compliance checks to guarantee a timely evaluation of reported data

- Methodology of compliance check was made transparent for MS
- Until 2013: mainly “manual” compliance check (Excel, MS Access-functions)
- From 2014 onwards: Structured Implementation and Information Framework (SIIF) → automatized compliance check (requires good quality data!)



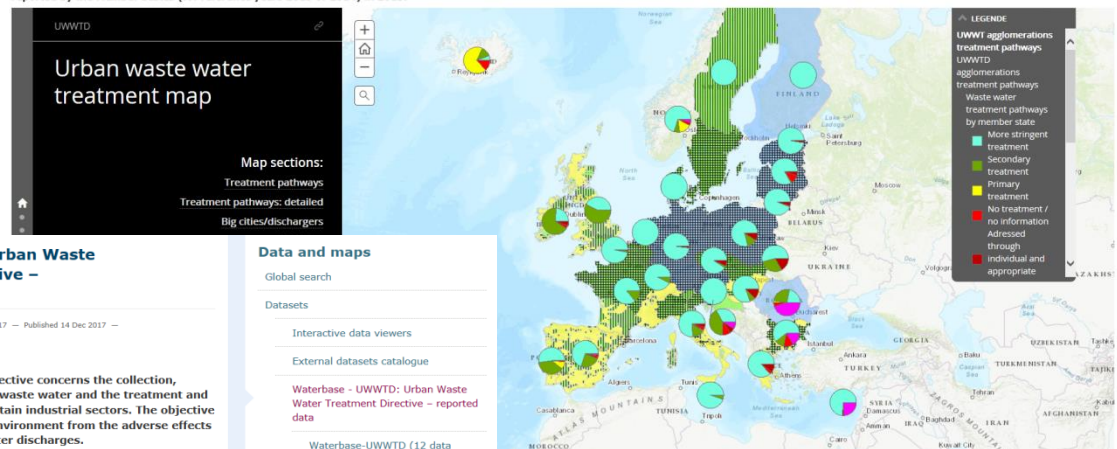
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Compliance check – requirement 7

Visualization/ publication tools to raise awareness for the effects of a legislation

Interactive maps

The map reflects the most recent available information at the EU-level on implementation of the Urban Waste Water Treatment Directive (UWWTD) in EU 28 plus Iceland, Norway and Switzerland based on data reported by the Member States (for reference years 2013 or 2014) in 2015.



Source: <https://www.eea.europa.eu/themes/water/water-pollution/uwwtd/interactive-maps/urban-waste-water-treatment-maps>

Databases

Source: <https://www.eea.europa.eu/data-and-maps/data/waterbase-uwwtd-urban-waste-water-treatment-directive-5>

UWWTD Synthesis Reports



Brussels, 14.12.2017
COM(2017) 749 final

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Ninth Report on the implementation status and the programmes for implementation (as required by Article 17 of Council Directive 91/271/EEC concerning urban waste water treatment)

(SWD(2017) 445 final)

Source:
http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm



Waterbase - UWWTD: Urban Waste Water Treatment Directive – reported data

Data — Prod-SD: DAT-106-en — Created 14 Dec 2017 — Published 14 Dec 2017 — Last modified 25 Jun 2018 — 22 min read

Topics: Water and marine environment

Urban Waste Water Treatment Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of the above mentioned waste water discharges.

European data Additional information Metadata

Waterbase-UWWTD (12 data tables, 3 codelists)

The dataset contains data selected from the reporting of Member States as part of the UWWTD implementation. The dataset is divided into tables on: reported period, receiving areas, agglomerations, urban waste water treatment plants (UWWTPs), links agglomerations – UWWTPs, discharge points, and (at Member State level) sludge handling and treated waste water re-use. 3 codelist tables (big cities, NUTS, common list of values) and 3 add-on tables (for agglomerations, UWWTPs and MSLevel) are included as well.

[+] Show table definition

- Waterbase-UWWTD (Microsoft Access database file) (ZIP archive)
6.92 MB Download file
- Waterbase-UWWTD (CSV files) (ZIP archive)
4.56 MB Download file

GIS data

- UWWTD GIS reference v4 (PDF document)

Data and maps

Global search

Datasets

Interactive data viewers

External datasets catalogue

Waterbase - UWWTD: Urban Waste Water Treatment Directive – reported data

Waterbase-UWWTD (12 data tables, 3 codelists)

GIS data

Maps and graphs

Interactive maps

Indicators

Data providers and partners

European data centres

Data visualisations

Dashboards

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Compliance check – requirement 8

Regular review of legislation to check efficiency, effects and to update

- UWWTD is an old Directive (1991)
- Currently: UWWTD fitness check at EU-level assessing:
 - ✓ Effectiveness
 - ✓ Efficiency
 - ✓ Coherence
 - ✓ Relevance
 - ✓ Added-value

Source: https://ec.europa.eu/info/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-and-less-costly/refit-platform_en

The screenshot shows the top navigation bar of the European Commission website, with 'Policies, information and services' selected. Below this is the European Commission logo and a search bar. The main content area is titled 'REFIT Platform' and describes its purpose: 'The REFIT Platform brings together the Commission, national authorities and other stakeholders in regular meetings to improve existing EU legislation.' Below this, there are three columns of information:

- The role, structure and working methods of the REFIT Platform**
The REFIT Platform was set up by the May 2015 Better Regulation Communication to advise the Commission on how to make EU regulation more efficient and effective while reducing burden and without undermining policy objectives.
- REFIT Platform members**
REFIT Platform members - Chairpersons
REFIT Platform members - the government group
REFIT Platform members - The stakeholder group
- REFIT Platform meetings**
Find information and documents related to the meetings of the REFIT Platform.

Below these columns, there are three more sections:

- Lighten the load**
Lighten the load: online form and suggestions received after 28 February 2017
Lighten the load: suggestions received before 28 February 2017
- REFIT Platform incoming suggestions**
The original suggestions received via means of letters are displayed on this page
- REFIT Platform work-in-progress**
The Commission examines all suggestions from stakeholders on how to make EU laws more effective and efficient. The Commission submits relevant suggestions to the REFIT Platform for advice.

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Compliance check – requirement 9

Commitment of relevant stakeholders (on EU-level: MS, on national level e.g. different ministries, chamber of commerce,...)

- Only achievable in case requested information for compliance checks is reasonable and proportional
- Missing commitment may stop the execution of legislation and the entire compliance assessment

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Interactive session (2 groups)

Please select one water/ wastewater related piece of legislation in your country and analyze, which requirements are fulfilled in good/ deficient way.

Where do you see most important obstacles for an efficient implementation/ compliance analysis/ enforcement?

Time frame: 20 – 30 min

Please briefly present your findings on a flip-chart after the interactive session.

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Requirements - summary:

- 1) Clear definition of elements of legislation
- 2) Clear definition of appropriate parameters to check compliance
- 3) Clear definition of reporting routines and formats in order to assess compliance
- 4) Strict timetable for reporting (ev. charges if reporting is not done on time)
- 5) Support during the reporting process
- 6) Automatized compliance checks to guarantee a timely evaluation of reported data
- 7) Visualization/ publication tools to raise awareness for the effects of a legislation
- 8) Regular review of legislation to check efficiency, effects and to up-date
- 9) Commitment of relevant stakeholders

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For further information

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Thank you for your attention.

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